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The Fiscal Impact of Energy Cost Increases on America's Cities

My name is Stephen S. Fuller. I presently serve on the faculty at George Mason University in the Institute of Public Policy. As an urban and regional economist, I have studied the economies of cities and regions over the course of the last thirty years. I understand their fiscal conditions and am familiar with and have participated in efforts to revitalize and rebuild their economies and tax bases.

Cities of all sizes throughout the United States do not understand the fiscal implications of the Kyoto Treaty. What my testimony will show is that the nation's cities are fiscally vulnerable to significant increases in their energy bills and they do not know the extent of this vulnerability. Furthermore, they can not afford to pay this bill.

As cities across America have struggled to recover from the 1990- 199 1 recession and to rebuild their economies and to revitalize their neighborhoods, they have not factored in the implications of higher energy costs on their ability to build a new future. These cities do not understand that the increased costs of energy to operate their buildings, light their streets, control traffic flows, and run their fleets of police cars, buses, fire trucks, snow plows, and utility vehicles could seriously undermine the tenuous fiscal balance they have struggled to achieve in recent years and reverse their economic recovery.

City officials do not know how much their current energy bill is and so they can not easily analyze how price increases resulting from implementing the provisions of the Kyoto Treaty could impact their budgets. My recent analysis of the City of Detroit's budget and its energy-use profile and costs provides important findings regarding the potential impacts of projected energy cost increases and underscores the limited choices that cities have available to them for paying this bill.

While these findings derive from the Detroit Study, they illustrate conditions that cities throughout the nation will confront when their energy costs rise sharply in response to price increases flowing from compliance with requirements of the Kyoto Treaty. And, these cost increases will be disproportionally more burdensome in older and poorer cities and cities located in harsher climates. It should also be noted that the findings reported here are based on energy price forecasts that reflect reductions in emissions to 1990 levels and not the greater reductions agreed to in Kyoto.

There are five key questions that should be addressed regarding the impact of higher energy costs on the nation's cities:

1. How much do cities pay for energy and how significant an expense does energy consumption represent in the municipal budget?

This question is difficult to answer because the cost of energy is largely invisible within the normal municipal budget (this is true for counties and states, too); it is not a line item at the department level or is there any aggregate energy cost identified in the overall budget. Additionally, many energy costs are hidden within other charges such as rental fees for buildings and street lights.

After detailed examination of Detroit's budget and extensive analysis of unpublished budget documents, we found the City's energy bill, as best as could be measured, to total $143.6 million in FY 1997.

2. How significant is this energy cost?

When compared to the total City budget, Detroit's energy bill at only **3.7** percent of its total annual outlays, may not appear significant. But that is not really the correct comparison. Payroll expenditures comprised almost 58 percent of the Detroit city budget and 81 percent of its school budget. If payroll and other fixed costs, such as debt service, are removed from the calculation, there was only 34 percent of the budget left to fund the City's operations and services. This is where energy costs are incurred. Measured against this base, energy costs account for 11 percent of the City's non-payroll and other fixed costs (Table 1).

Table 1

Budget and Energy Costs
The City of Detroit, FY 1997
(dollars in millions)

Division	Total Budget	Payroll & Fixed Charges	Operations & Services	Energy Costs	Per-Cent
City	$2,358	$1,340	$1,018	$113	11.1%
Schools	$1,427	$1,169	$ 258	$ 23	8.9%
Airport	$ 90	$ 49	$ 41	$ 8	18.5%
Totals	$3,875	$2,558	$1,318	$144	11.0%

Source: City of Detroit and S. S. Fuller

3. By how much would cities' energy costs go up if Greenhouse Gases were reduced to their 1990 level?

In Detroit, given its energy-use profile and estimates of possible cost increases (based on earlier pre-Kyoto Treaty WEFA studies), the City's energy bill would grow from $143.6 million to $222.5 million, an increase of $78.9 million or 54.9 percent (assuming that the quantities and mix of energy consumption remained unaffected by price increases).

The City's share of this increase would be $62.5 million and its total projected energy cost would account for 17.2 percent of its outlays for operations and services. The school's projected energy bill would increase by $12.5 million with total projected energy costs accounting for 13.8 percent of its outlays for operations and services. And, the airport's energy costs would increase by $3.9 million with its total projected energy costs accounting for 28.3 percent of total outlays for operations and services.

As a result of these projected energy cost increases, the energy cost share of funding all City operations and services would increase from 11.0 to 16.9 percent, representing an annual bill of $222.5 million (Table 2).

Table 2

Energy Cost Increase
City of Detroit
(dollars in millions)

Division	Current Cost	%(1)	Projected Cost	%(1)
City	$122.9	11.1	$175.4	17.2
Schools	$ 23.1	8.9	$ 35.5	13.8
Airport	$ 7.6	18.5	$ 11.6	28.3
Total	$143.6	11.0	$222.5	16.9

(1) percent of budgeted 1997 outlays for operations and services

4. **How can the City pay for this increase in energy costs?**

Its choices are limited. It can raise new revenues to pay for this increase or it can pay for it from current funds by reallocating resources away from operations and services.

If the City of Detroit was to fund its higher energy costs by raising new revenues, these would have to come from local sources. Local revenue sources account for 65 percent of the City's total revenues with one-third of these local revenues generated by property and income taxes. These constitute the City's largest single revenue sources and are the only possible sources of new revenues that could be considered for paying the increased energy bill. If the municipal income tax was used to raise the additional $62.5 million for the City's new energy costs, it would represent an 18 percent increase and represent a $300.00 increase in the average City resident's annual bill.

Alternatively, if the City opted to fund its increased energy costs from current funds, it would have to reduce services, cut payroll and benefits, and defer maintenance. Many cities have been forced to undertake these measures to balance their budgets in the face of their eroding tax base, especially since the 1990- 199 1 recession.

Energy conservation will not produce the magnitude of cost savings needed to off-set higher energy costs as all the significant energy efficiencies have already been achieved in response to previous energy crises. This is seen in the gas mileage improvements in the City's fleet of vehicles and greater efficiencies in heating and cooling public buildings and in generating electricity.

The City's options for funding its increased energy costs by reallocating funds within departments are also limited as much of their budget consist of fixed expenses. To achieve cost savings of sufficient magnitudes to offset the increased energy bill leaves payroll and operations as the principal targets.

The increased energy bill for the fire and police departments in Detroit is projected to total $20.6 million. To pay for this out of workforce reductions would require eliminating 350 jobs, a staffing decrease of 5.4 percent. On a city wide basis, paying the increased energy bill from payroll reductions would require the City to downsize its workforce by 6 percent at the cost of 1,170 jobs. The cost impacts of these energy cost payment options for just the City (excluding schools and the airport) are summarized in Table 3.

Table 3

Summary of Fiscal Impacts
From Projected Energy Cost Increases
City of Detroit

Funding Options	Impact	Dollars/Jobs
Increase City Income Tax	up 17.8%	$300/Household
Reduce City-wide Workforce	down 6.0%	-1,170 jobs
Agency Illustration:		
Cutback Fire and Police	down 5.6%	-350 jobs
Total City energy cost impact		$62.5 million

Taking this payroll spending out of the economy would have other serious consequences on the City. It would translate into higher unemployment and social services demand at a time when the City's ability to provide these services would have been substantially diminished. Furthermore, the consequence of funding the increased energy bill by reducing city services and cutting back on its workforce would doom any city's efforts to rebuild its economic base and to revitalize neighborhoods

5. What will be the fiscal impact on cities of significant increases in their energy costs?

The economic and fiscal impacts of increased energy costs on city budgets across the nation could be substantial and place disproportionally heavy financial burdens on these cities at a time when they are struggling to meet current expenses and are under growing pressures to increase their support of basic services while attempting to rebuild and reposition their economies. The diversion of city revenues away from much needed physical improvements and essential public services to pay for increased energy costs stemming from requirements to reduce Greenhouse Gases will result in increased unemployment, lost earnings, a diminished standard of living in and accelerated outmigration from the central cities, and increased physical deterioration of the cities' housing and productive capacity. And, these fiscal crises will extend beyond the older and larger cities to their suburbs and to smaller jurisdictions across the nation

This shift of scarce funds away from essential public services to pay for the projected increase in energy costs will have profound negative impacts on the nation's cities. And, their elected officials and professional managers have no idea how big this bill could be. Therefore, they are totally unprepared for the financial impacts that increased energy costs stemming from the Kyoto Treaty will have on their ability to operate their cities in a fiscally sound manner while continuing to meet the basic public service requirements of their residents.